

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No.: **ISPH-0752**

Inventors: **Bennett and Freier**

Serial No.: **Not Yet Assigned**

Filing Date: **Herewith**

Examiner: **Not Yet Assigned**

Group Art Unit: **Not Yet Assigned**

Title: **Antisense Modulation of IL-4 Receptor
Associated Kinase-4 Expression**

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By Jane Massey Licata
Typed Name: **Jane Massey Licata, Reg. No. 32,257**

Commissioner for Patents
Mail Stop Sequence
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R.
§§1.97-1.98, information relating to the above-identified
application is hereby disclosed. Inclusion of information in
this statement is not to be construed as an admission that this
information is material as that term is defined in 37 C.F.R.
§1.56(b).

(xx) In accordance with §1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of the above identified application as set forth in §1.491, or before the mailing date of a first Office Action on the merits of the above-identified application, no additional fee is required.

In accordance with §1.97(c), this Information Disclosure Statement is being filed after the period set forth in §1.97(b) above but before the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311, therefore:

Certification in Accordance with §1.97(e) is set forth below; or

The fee of \$240.00 as set forth in §1.17(p) is attached.

In accordance with §1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311 but before the payment of the Issue Fee, therefore included are: Certification in Accordance with §1.97(e); Petition Requesting Consideration of the Information Disclosure Statement; and the fee of \$130.00 as set forth in §1.17(I)(1).

Copies of each of the references listed on the attached Form PTO-1449 (modified) are enclosed herewith.

(xx) In accordance with §1.98(d), copies of some or all of the references listed on the attached Form PTO-1449 (modified) are not enclosed herewith because they were previously submitted to the U.S. Patent and Trademark Office in prior application Serial No. 09/966,451, filed September 28, 2001 for which a claim for priority under 35 U.S.C. §120 has been made in the instant application.

Please charge any deficiency or credit any overpayment to Deposit Account No. 50-1619. This form is submitted in duplicate.

The relevance of the listed references in a foreign language is as stated in the specification at pages @@.

(xx) All listed references are in the English language.

Respectfully submitted,

Jane Massey Licata
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Date: July 30, 2003

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Form PTO-1449 Modified		Docket No. ISPH-0752	Serial No. not yet assigned
List of Patents and Publications Cited by Application (Use several sheets if necessary)		Applicant C. Frank Bennett et al.	
U.S. Department of Commerce Patent and Trademark Office		Filing Date herewith	Group
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	AA	Bacher et al., <i>The Drosophila proteins Pelle and Tube induce JNK/AP-1 activity in mammalian cells</i> , FEBS Lett., 2001, 497:153-158	
	AB	Burns et al., <i>Tollip, a new component of the IL-1RI pathway, links IRAK to the IL-1 receptor</i> , Nat. Cell Biol., 2000, 2:346-351	
	AC	Burns et al., <i>MyD88, an adapter protein involved in interleukin-1 signaling</i> , J. Biol. Chem., 1998, 273:12203-12209	
	AD	Cao et al., <i>IRAK: a kinase associated with the interleukin-1 receptor</i> , Science, 1996, 271:1128-1131	
	AE	Huang et al., <i>Recruitment of IRAK to the interleukin 1 receptor complex requires interleukin 1 receptor accessory protein</i> , Proc. Natl. Acad. Sci. U. S. A., 1997, 94:12829-12832	
	AF	Jefferies et al., <i>Transactivation by the p65 Subunit of NF-kappaB in Response to Interleukin-1 (IL-1) Involves MyD88, IL-1 Receptor-Associated Kinase 1, TRAF-6, and Rac1</i> , Mol. Cell. Biol., 2001, 21:4544-4552	
	AG	O'Neill et al., <i>Signal transduction pathways activated by the IL-1 receptor family: ancient signaling machinery in mammals, insects, and plants</i> , J. Leukoc. Biol., 1998, 63:650-657	
	AH	Scanlan et al., <i>Antigens recognized by autologous antibody in patients with renal-cell carcinoma</i> , Int. J. Cancer, 1999, 83:456-464	
	AI	Vig et al., <i>Modulation of tumor necrosis factor and interleukin-1-dependent NF-kappaB activity by mPLK/IRAK</i> , J. Biol. Chem., 1999, 274:13077-13084	
	AJ	Vig et al., <i>SIMPL is a tumor necrosis factor-specific regulator of nuclear factor-kappaB activity</i> , J. Biol. Chem., 2001, 276:7859-7866	
EXAMINER		DATE CONSIDERED	

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U.S. Department of Commerce Patent and Trademark Office		Filing Date herewith	Group
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	AK	Wesche et al., <i>IRAK-M is a novel member of the Pelle/interleukin-1 receptor-associated kinase (IRAK) family, J. Biol. Chem., 1999, 274:19403-19410</i>	
EXAMINER		DATE CONSIDERED	

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List of Patents and Publications Cited by Application (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Applicant C. Frank Bennett et al.	
		Filing Date Herewith	Group

U. S. PATENT DOCUMENTS

Examiner's Initial		Document No.	Date	Name	Class	Subclass
	AA					
	AB					
	AC					
	AD					
	AE					
	AF					
	AG					
	AH					
	AI					
	AJ					
	AK					
	AL					
	AM					
	AN					

FOREIGN PATENT DOCUMENTS

Examiner's Initial		Document No.	Date	Country	Translation YES NO
	AO	WO 00/73807	12/7/2000	PCT	X
	AP	WO 01/51641	7/19/2001	PCT	X
	AQ				
	AR				
	AS				
	AT				
	AU				
	AV				
	AW				
	AX				

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<p>Form PTO-1449 Modified</p> <p>List of Patents and Publications Cited by Applicant (Use several sheets if necessary)</p> <p>U.S. Department of Commerce</p>	<p>Docket No. ISPH-0752</p> <p>Applicant Bennett and Freier</p>	<p>Serial No. Not yet assigned</p>
	<p>Filing Date Herewith</p>	<p>Group</p>

U. S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Translation YES	NO
	AQ	WO 01/29262 A2	26-4-01	PCT	X	

EXAMINER

DATE CONSIDERED